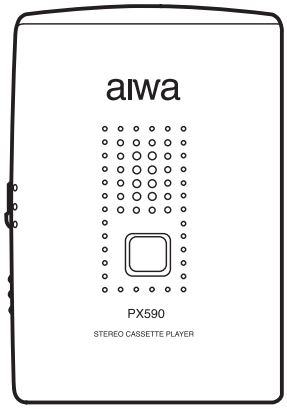
aiwa
SERVICE

HS-PX590 [L] AH
HS-PX997 AE



SERVICE MANUAL

STEREO CASSETTE PLAYER

BASIC TAPE MECHANISM : 7ZM-1 P1

aiwa

S/M Code No. 09-996-405-2R3

SPECIFICATIONS

Maximum output:	4 mW + 4 mW (EIAJ/32Ω)<[L]AH> 4 mW + 4 mW (EIAJ/32Ω)<AE>
Load impedance:	16 – 32 ohms
Power sources:	DC 1.2 V using supplied rechargeable battery NB-5G, DC 1.5 V using an R6 (AA) dry cell battery, AC house current using the optional AC adaptor
Maximum dimensions:	80 (W) x 112.9 (H) x 18.9 (D) mm ($3^1/_4$ x $4^1/_2$ x $^3/_4$in.)
Weight	Approx. 158 g, (5.5 oz) (including the rechargeable battery, excluding the battery case)

- Design and specifications are subject to change without notice.

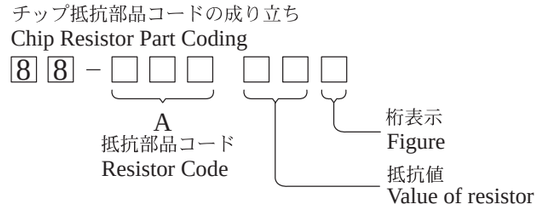
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.

ELECTRICAL MAIN PARTS LIST

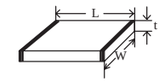
REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-179-010		C-IC,TA2123AF
	87-A21-061-010		C-IC,ML63512-120
	87-A21-050-040		C-IC,S-80810ANNP-E70-T2
	87-A20-603-140		C-IC,RN5RK241A
	87-A20-961-040		C-IC,MM1279XV
	87-A20-818-040		C-IC,NJM2185AV<AE>
TRANSISTOR			
	89-113-625-080		TR,2SA1362GR
	87-026-535-080		C-TR,RN4907
	87-026-418-080		TR,RN1311
	89-342-132-080		TR,2SC4213B
	87-026-417-080		TR,RN1310
	89-341-165-080		C-TR,2SC4116GR
	87-026-481-080		C-TR,RN4607<AE>
DIODE			
	87-001-553-080		C-DIODE 1SS322
MAIN C.B			
C101	87-012-273-080		C-CAP,U 820P-50 B
C102	87-012-273-080		C-CAP,U 820P-50 B
C103	87-012-273-080		C-CAP,U 820P-50 B
C104	87-012-273-080		C-CAP,U 820P-50 B
C105	87-A10-952-080		C-CAP,TN 22-4 M A MCM
C106	87-A10-952-080		C-CAP,TN 22-4 M A MCM
C107	87-016-114-080		C-CAP,U0.01-25B
C108	87-016-114-080		C-CAP,U0.01-25B
C109	87-010-828-080		CHIP CAPACITOR,U 0.033-
C110	87-010-828-080		CHIP CAPACITOR,U 0.033-
C111	87-A10-025-080		C-CAP,U 0.22-16Z F
C112	87-A10-031-080		C-CAP,U 0.01-25 KB
C113	87-A10-263-080		C-CAP,U 0.1-16ZF
C114	87-A11-056-080		C-CAP,U 1-10 Z F
C115	87-A10-952-080		C-CAP,TN 22-4 M A MCM
C116	87-A11-244-080		C-CAP,TN 47-4 A MCM
C117	87-A10-707-080		C-CAP,U 0.47U-16 F Z
C118	87-A10-707-080		C-CAP,U 0.47U-16 F Z
C119	87-A10-707-080		C-CAP,U 0.47U-16 F Z
C120	87-A10-704-080		C-CAP,TN 100-2.5 M B2
C121	87-A10-704-080		C-CAP,TN 100-2.5 M B2
C122	87-010-424-080		CAPACTOR,TANTAL 4.7-4
C123	87-A11-063-080		C-CAP,S 4.7-10 Z F
C124	87-A10-707-080		C-CAP,U 0.47U-16 F Z
C125	87-A10-263-080		C-CAP,U 0.1-16ZF
C126	87-A10-263-080		C-CAP,U 0.1-16ZF
C127	87-A10-031-080		C-CAP,U 0.01-25 KB
C128	87-A10-031-080		C-CAP,U 0.01-25 KB
C129	87-016-462-080		C-CAP,S 1-16 F
C130	87-016-462-080		C-CAP,S 1-16 F
C131	87-012-274-080		CHIP CAP,U 1000P-50B
C132	87-012-274-080		CHIP CAP,U 1000P-50B
C133	87-A10-025-080		C-CAP,U 0.22-16Z F
C134	87-A10-707-080		C-CAP,U 0.47U-16 F Z
C135	87-A11-056-080		C-CAP,U 1-10 Z F
C136	87-A10-707-080		C-CAP,U 0.47U-16 F Z
C137	87-A10-707-080		C-CAP,U 0.47U-16 F Z
C138	87-A11-063-080		C-CAP,S 4.7-10 Z F
C139	87-A10-025-080		C-CAP,U 0.22-16Z F
C140	87-A11-062-080		C-CAP,S 2.2-16 Z F
C141	87-A11-063-080		C-CAP,S 4.7-10 Z F
C142	87-016-317-080		C-CAP,TN 2.2-6.3
C143	87-A10-952-080		C-CAP,TN 22-4 M A MCM
C151	87-016-462-080		C-CAP,S 1-16 ZF<AE>
C152	87-016-462-080		C-CAP,S 1-16 ZF<AE>
C153	87-012-274-080		C-CAP,U 1000P-50 KB<AE>
C154	87-010-746-080		C-CAP,TN 10-4 M 125<AE>
C155	87-016-526-080		C-CAP,S 0.47-16 BK<AE>
C156	87-016-526-080		C-CAP,S 0.47-16 BK<AE>
C157	87-016-460-080		C-CAP,S 0.22-16 KB<AE>
C158	87-016-460-080		C-CAP,S 0.22-16 KB<AE>
C159	87-010-746-080		C-CAP,TN 10-4 M 125<AE>
C160	87-016-462-080		C-CAP,S 1-16 F<AE>
C161	87-016-462-080		C-CAP,S 1-16 F<AE>
C201	87-016-462-080		C-CAP,S 1-16 Z F
C202	87-010-505-080		CAP,CHIP TANTALUM 1-16
C203	87-A10-263-080		C-CAP,U 0.1-16ZF
C204	87-A10-263-080		C-CAP,U 0.1-16ZF
C205	87-A11-056-080		C-CAP,U 1-10 Z F
C206	87-A11-056-080		C-CAP,U 1-10 Z F
C207	87-A10-263-080		C-CAP,U 0.1-16ZF
C208	87-A10-263-080		C-CAP,U 0.1-16ZF
C209	87-010-787-080		CAP, U 0.022-25
C210	87-A10-263-080		C-CAP,U 0.1-16 Z F
C211	87-012-276-080		CHIP CAP,U 1500P-50B<AH>
C211	87-012-270-080		CHIP CAP,U 470P-50B<AE>
C212	87-012-276-080		CHIP CAP,U 1500P-50B<AH>
C212	87-012-270-080		CHIP CAP,U 470P-50B<AE>
C214	87-012-274-080		CHIP CAP,U 1000P-50B
C215	87-A10-263-080		C-CAP,U 0.1-16 Z F
C216	87-A10-263-080		C-CAP,U 0.1-16 Z F
C251	87-016-462-080		C-CAP,S 1-16 F
C252	87-A10-952-080		C-CAP,TN 22-4 M A MCM
C253	87-A10-263-080		C-CAP,U 0.1-16 Z F
C254	87-A10-953-080		C-CAP,TN 47-4 M B2 MCM
C255	87-A10-034-080		C-CAP,TN 33-10(B2)
C256	87-A10-263-080		C-CAP,U 0.1-16ZF
C257	87-A10-952-080		C-CAP,TN 22-4 M A MCM
C261	87-A11-062-080		C-CAP,S 2.2-16 ZF
C271	87-A11-062-080		C-CAP,S 2.2-16 ZF
C301	87-A10-031-080		C-CAP,U 0.01-25 KB
C302	87-A10-260-080		C-CAP,U 0.1-16 K B
C303	87-A11-063-080		C-CAP,S 4.7-10 Z F
C304	87-A10-263-080		C-CAP,U 0.1-16ZF
C305	87-A10-707-080		C-CAP,U 0.47-10 ZF
C306	87-A10-707-080		C-CAP,U 0.47U-16 F Z
C307	87-A10-031-080		C-CAP,U 0.01-25 KB
C308	87-A10-031-080		C-CAP,U 0.01-25 KB
C309	87-A10-031-080		C-CAP,U 0.01-25 KB
D201	87-A90-278-080		C-LED,SML-210VT RED
J101	85-HK3-605-010		JACK,DIA3.5 ST 5P
JR159	87-016-462-080		C-CAP,S 1-16 F Z<AH>
JR160	87-016-462-080		C-CAP,S 1-16 F Z<AH>
L200	87-003-375-080		C-COIL,1608 10UH K MLF1608
L251	87-A50-352-080		C-COIL, 100UH NP 05DB101M
PS261	87-A91-374-080		C-SNSR,PHOTO, NJL5194KN
PS271	87-A91-374-080		C-SNSR,PHOTO, NJL5194KN
R103	87-022-279-080		CHIP RES,U 470-1/16W F<AE>
R104	87-022-279-080		CHIP RES,U 470-1/16W F<AE>
R105	87-022-215-080		CHIP RES,U 1K-1/16W F<AE>
R106	87-022-215-080		CHIP RES,U 1K-1/16W F<AE>
R107	87-022-243-080		CHIP RES,U 15K-1/16W F
R108	87-022-243-080		CHIP RES,U 15K-1/16W F
R109	87-022-292-080		CHIP RES U 330K-1/16W F
R110	87-022-292-080		CHIP RES U 330K-1/16W F
R151	87-022-252-080		CHIP RES,U 36K-1/16W F<AE>
R214	87-022-243-080		CHIP RES,U 15K-1/16W F
R215	87-022-243-080		CHIP RES,U 15K-1/16W F
S101	8Z-HK4-606-010		SW,LEAF 7ZM-1
S201	87-A90-330-080		C-SW,SL 1-1-2 SSSS81
S202	87-A90-330-080		C-SW,SL 1-1-2 SSSS81
S203	87-A90-665-180		C-SW,TACT LS7A2M
S204	87-A90-665-180		C-SW,TACT LS7A2M
S205	87-A90-665-180		C-SW,TACT LS7A2M
S206	87-A90-665-180		C-SW,TACT LS7A2M
S207	87-036-237-080		CHIP SWICH PUSH
S208	87-036-237-080		CHIP SWICH PUSH
S209	8Z-HK4-607-010		SW,LID 7ZM-1
SFR301	87-A91-092-080		C-SFR,68K RH03APA
TH301	87-A91-190-080		C-THMS,10K(2125)NSF2103J
VR101	87-024-686-080		C-VR,20KAX2 DIA14
X201	87-A70-151-110		VIB,XTAL 32.768KHZ VT-
HEAD FLEX C.B			
PH1	87-ZM1-601-010		HEAD ASSY, 7ZM-1

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

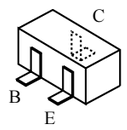
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



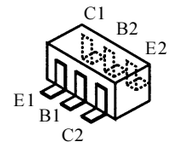
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード ：A Resistor Code ：A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION

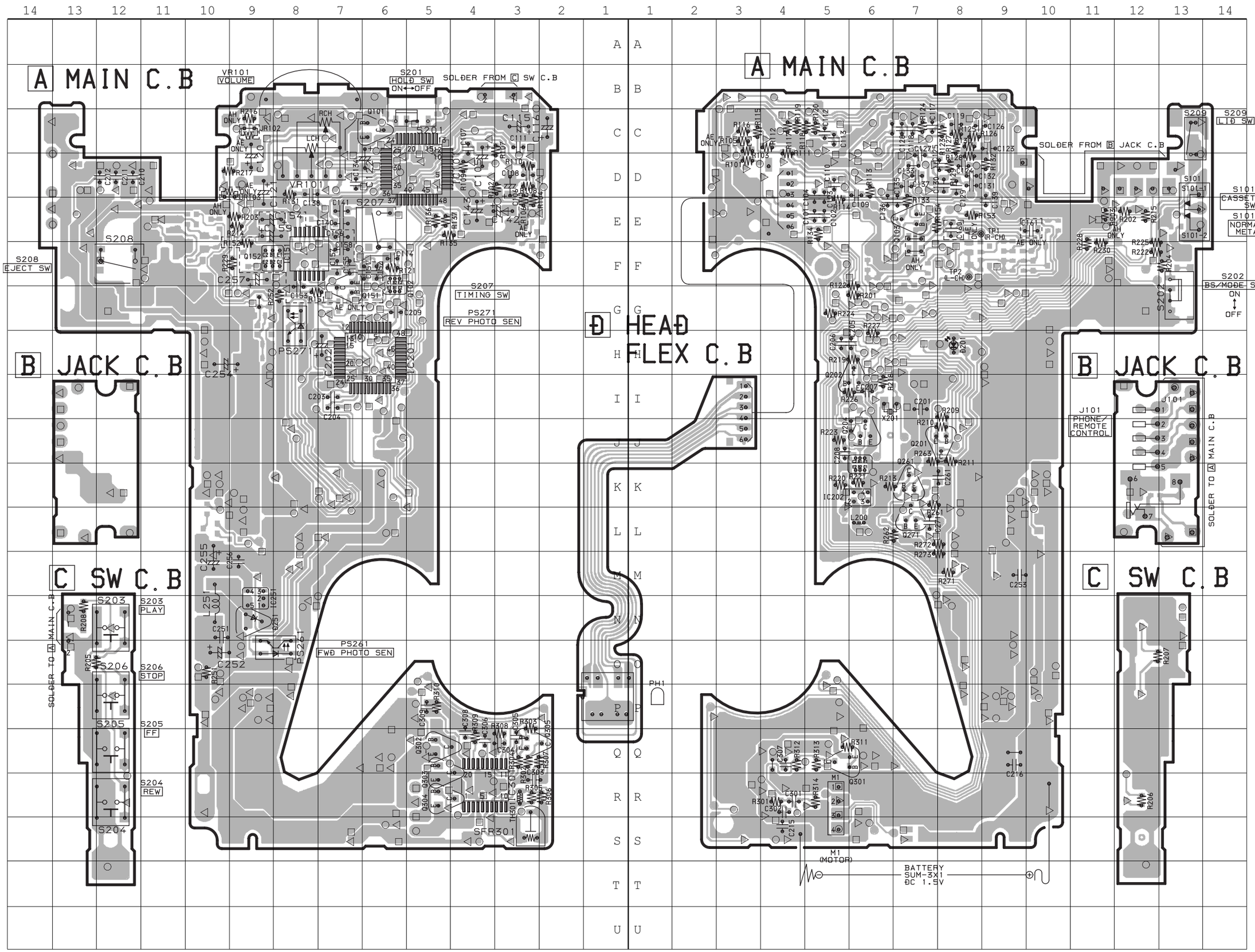


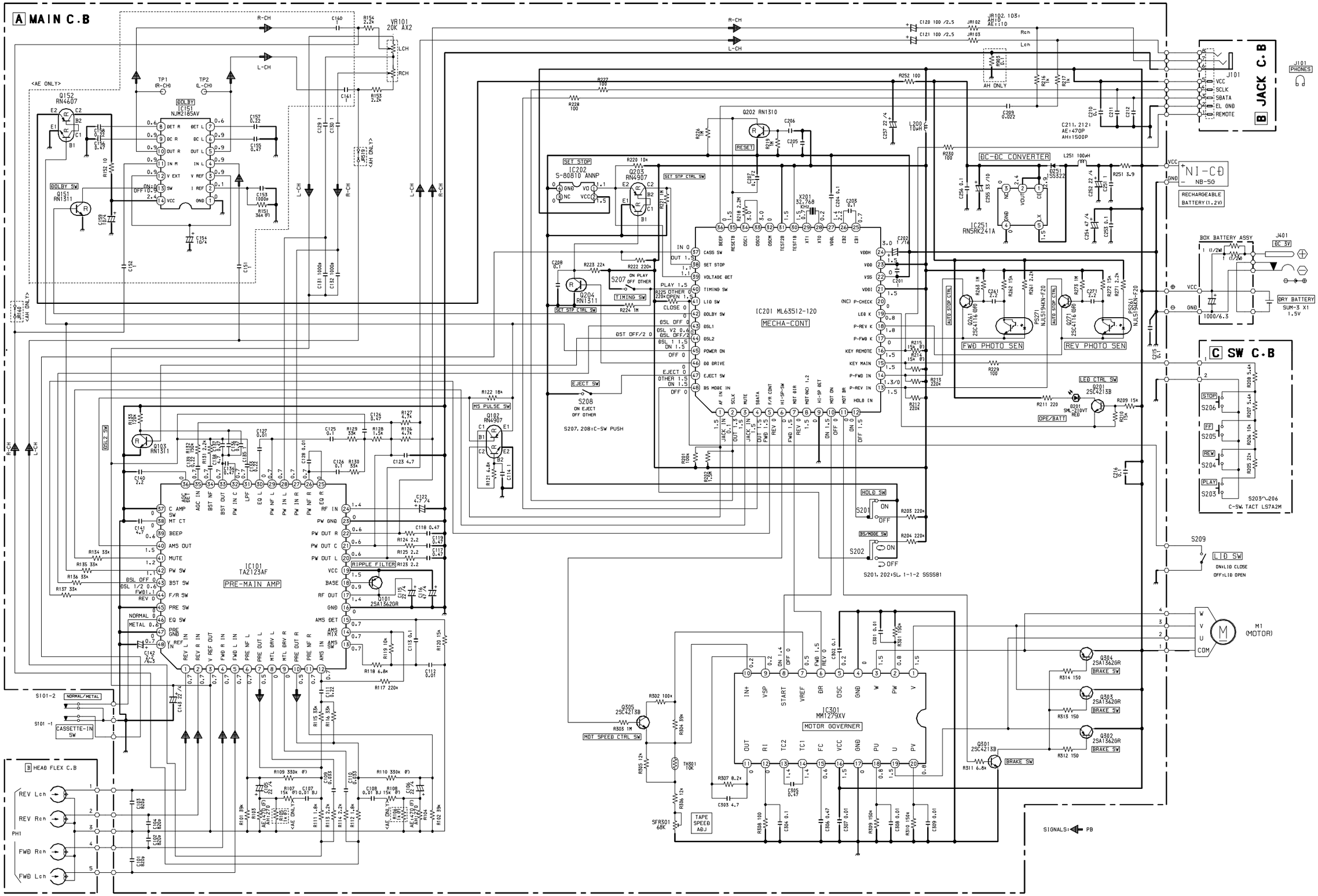
RN1310
RN1311
2SC4213B
2SC4116GR
2SA1362GR



RN4907
RN4607

WIRING


A MAIN C.B
VR101 VOLUME
S201 HOLD SW ON↔OFF
SOLDER FROM C SW C.B
S208 EJECT SW
S207 TIMING SW
PS271 REV PHOTO SEN
B JACK C.B
D HEAD FLEX C.B
A MAIN C.B
S209 LID SW
SOLDER FROM B JACK C.B
S101 S101-1 CASSETE-IN SW S101-2 NORMAL/METAL
S202 BS/MODE SW ON ↕ OFF
B JACK C.B
J101 PHONE/REMOTE CONTROL
SOLDER TO A MAIN C.B
C SW C.B
S203 PLAY
S206 STOP
S205 FF
S204 REW
SOLDER TO A MAIN C.B
PS261 FWD PHOTO SEN
PH1
M1 (MOTOR)
BATTERY SUM-3X1 DC 1.5V
C SW C.B


A MAIN C.B
B JACK C.B
C SW C.B
B HEAD FLEX C.B
IC201 ML63512-120
MECHA-CONT
IC101 TA2123AF
PRE-MAIN AMP
IC301 MM1279XV
MOTOR GOVERNER
IC202 S-80810 ANNP
IC151 NJM2185AV
IC251 RN5RK241A
BC-DC CONVERTER
NI-CD
NB-5G
RECHARGEABLE BATTERY (1.2V)
BOX BATTERY ASSY
DRY BATTERY
SUM-3 X1 1.5V
FWD PHOTO SEN
REV PHOTO SEN
AUTO STOP CTRL
LED CTRL SW
OPE/BATT
HOLD SW
BS/MODE SW
LID SW
M1 (MOTOR)
MOT SPEED CTRL SW
BRAKE SW
TAPE SPEED ADJ
CASSETTE-IN SW
NORMAL/METAL
MS PULSE SW
DOLBY SW
SET STOP
EJECT SW
TIMING SW
SET STP CTRL SW
S207, 208:C-SW PUSH
S207 ON PLAY OFF OTHER
S208 ON EJECT OFF OTHER
S201, 202:SL 1-1-2 SSSSB1
S203~206 C-SW TACT LS7A2M
SIGNALS: PB
R-CH
L-CH
VCC
SCLK
SBATA
EL GND
REMOTE
PHONES
REV Lch
REV Rch
FWD Rch
FWD Lch

IC DESCRIPTION

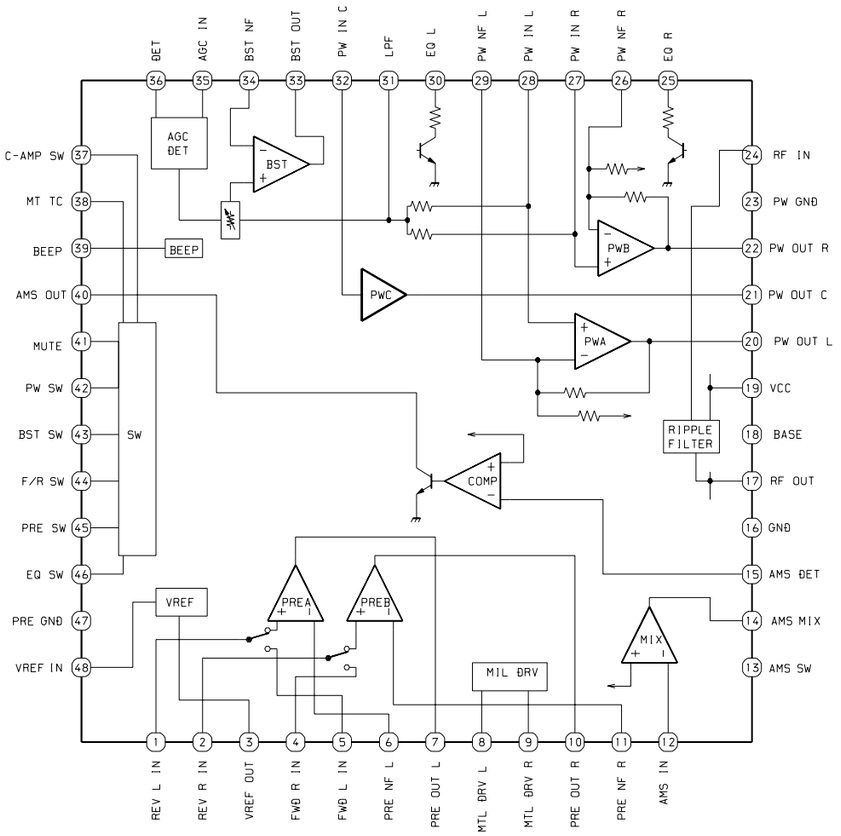
IC, ML63512-120

Pin No.	Pin Name	I/O	Description
1	AF IN	I	'H': Exist music, 'L': Not exist music.
2	SCLK	I	Serial clock input terminal.
3	MUTE	O	'H': MUTE OFF, 'L': MUTE ON.
4	SDATA	O	Serial data output terminal.
5	F/R CONT	O	'H': FWD direction, 'L': REV direction.
6	HI-SP-SW	O	'H': Motor HI speed.
7	MOT DIR	O	'H': Motor counterclockwise (FWD), 'L': Motor clockwise (REV).
8	MOTOR 1. 2(NC)	O	Motor normal speed. (Not connected)
9	HI-SP DET	I	'H': No exist DD drive output, 'L': Exist DD drive output.
10	MOT ON	O	'H': Motor ON, 'L': Motor OFF.
11	MOT BR	O	'H': Motor brake ON, 'L': Motor brake OFF.
12	HOLD IN	I	'H' : Hold OFF, 'L' : Hold ON.
13	P-REV IN	I	Photo senser input terminal (REV side).
14	P-FWD IN	I	Photo senser input terminal (FWD side).
15	KEY MAIN	I	Key input terminal (Main unit).
16	KEY REMOTE	I	Key input terminal (Remote controller).
17	P-FWD K	O	Output for photo senser control (FWD side).
18	P-REV K	O	Output for photo senser control (REV side).
19	LED K	O	OPE battery LED control output.
20	P-CHECK (NC)	O	Photo senser puls checking output. (Not connected)
21	VDDI	-	Interface power supply terminal for external equipment.
22	VSS	-	Negative power supply terminal.
23	VDD	-	Positive power supply terminal.
24	VDDH	-	Boost power supply for backup.
25 ~ 26	CB1 ~ CB2	-	Connected to power supply booster capacitor.
27	VDDL	-	Positive power supply for internal logic circuit.
28 ~ 29	XT0 ~ XT1	-	Clock oscilltor terminals (Low speed side). Connected to 32.768 kHz crystal oscillator.
30 ~ 31	TEST1B ~ TEST2B	-	Test terminals.
32	OSCM	-	Connected to capacitor for high speed clock.
33 ~ 34	OSC0 ~ OSC1	-	Clock oscilltor terminals (high speed side).
35	RESETB	I	Reset input.
36	BEEP	O	Alarm sound output.
37	CASS SW	I	'H': Exist cassette, 'L': Not exist cassette.
38	SET STOP	I	'H': Normal operation, 'L': Mechanism stop.
39	VOLTAGE DET	I	Input terminal for control motor speed.
40	TIMING SW	I	Input terminal for detect mechanism operation.
41	LID SW	I	'H': Cassette case OPEN, 'L': Cassette case CLOSE.
42	DOLBY SW	I	'H': Dolby ON, 'L': Dolby OFF.
43	DSL1	O	Output: DSL1 OFF, Stop: DSL1 ON.
44	DSL2/EGS	O	'H': DSL2/EGS OFF, 'L': DSL2/EGS ON.

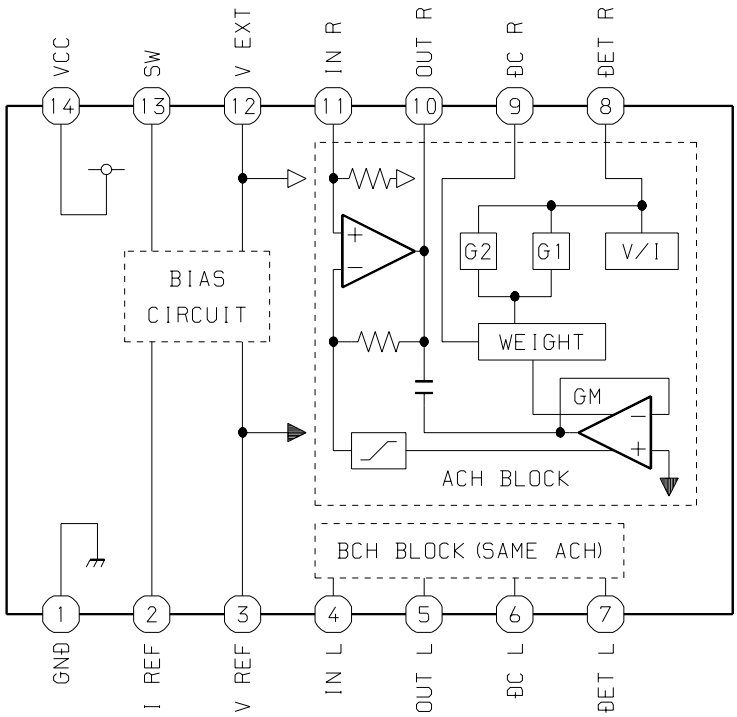
Pin No.	Pin Name	I/O	Description
45	POWER ON	O	"H" : Power ON, "L" : Power OFF.
46	DD DRIVE	O	Output terminal for control DC-DC converter.
47	EJECT SW	I	Input terminal for detect EJECT operation. "L" : Wait.
48	BS / MODE IN	I	"H" : Continuous playback / BS enable, "L" : Auto reverse playback / BS disable.

IC BLOCK DIAGRAM

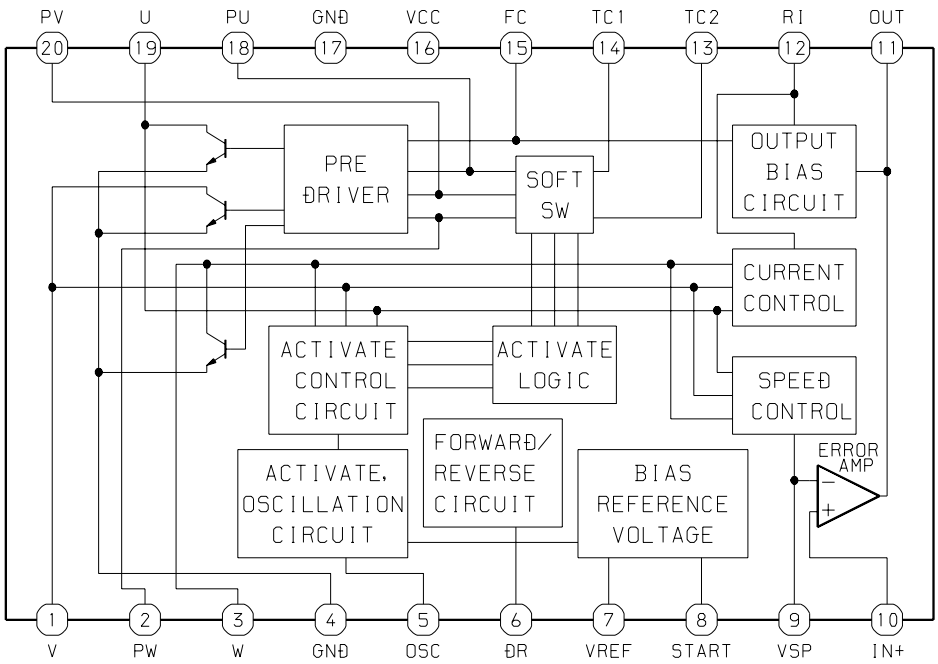
IC, TA2123AF

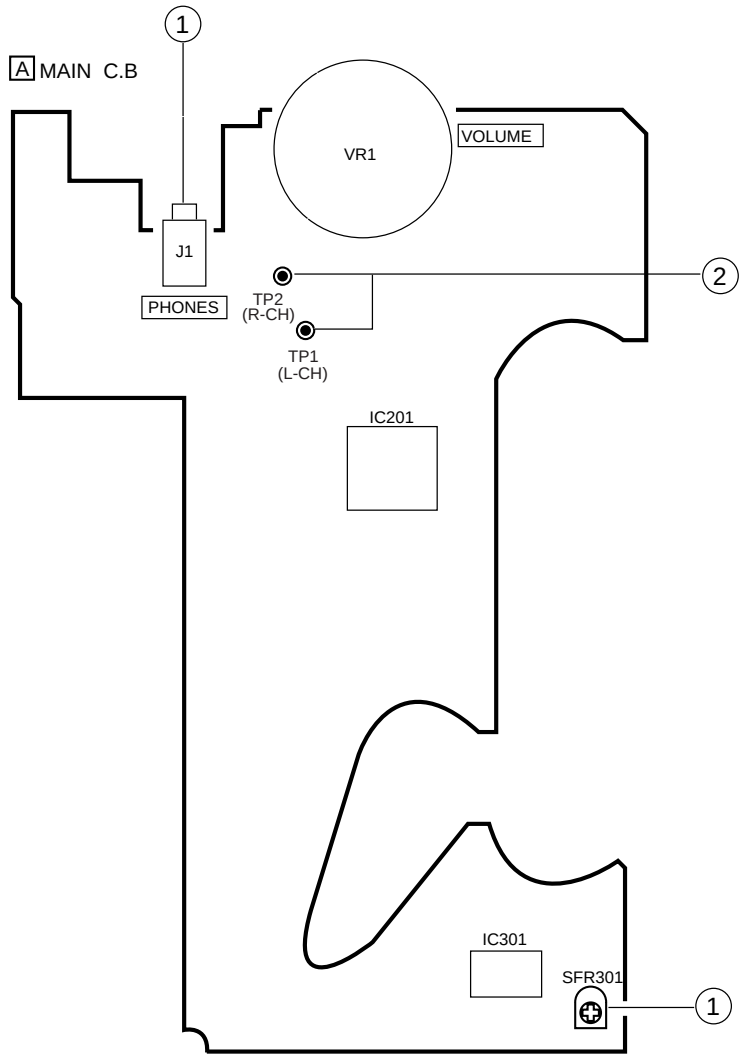


IC, NJM2185AV



IC, MM1279XV





<TAPE PLAYER SECTION>

1. Tape Speed Adjustment
   Settings : • Test tape : TTA–100 (Tape center)
   • Test point : PHONES (J101)
   • Adjustment location : SFR301
   • MSP : CLASSIC
   • TAPE SELECTOR : NORM
   • VOLUME : MAX
   Method : Play back (FWD) the test tape and adjust SFR301 so that the frequency becomes 3015Hz±10Hz. Then confirm WOW is less than 0.50%.

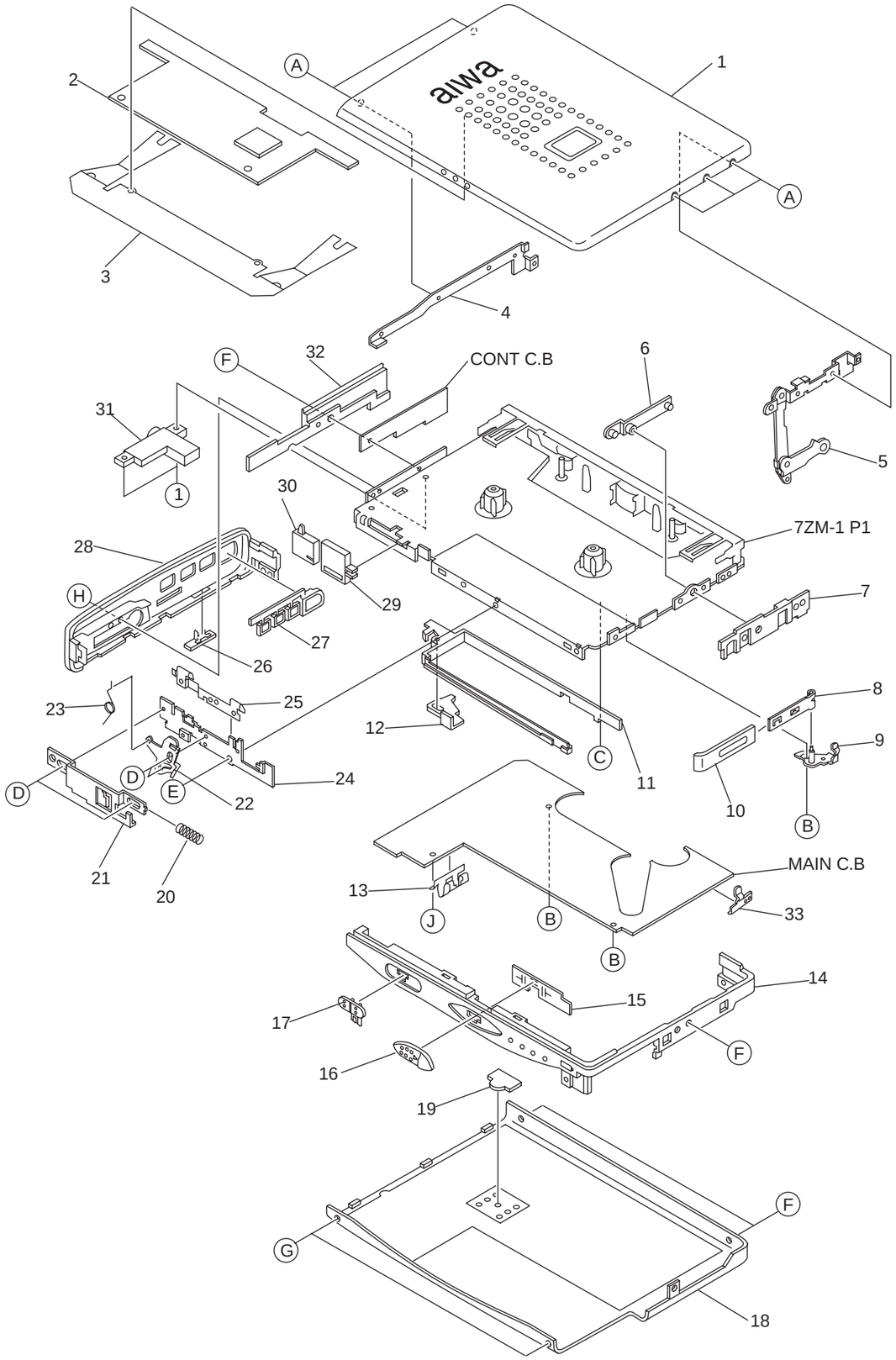
2. Dolby level check
   Settings : • Test tape : TTA–200
   • Test point : Dolby test point TP1(L-CH) TP2(R-CH)
   • DOLBY SW : OFF
   • DSL : OFF
   • TAPE SELECTOR : NORM(auto)
   • VOLUME : MIN
   Method : Connected an electroytic capacitor (10uF/16V) to measured equipment and TP1, check the voltage for 32± 1.0dB.

PRACTICAL SERVICE FIGURE

<TAPE SECTION>

Tape speed :	3015Hz ± 50Hz
Wow :	Less than 0.5% (RMS)
Take-up torque :	13 ~ 22g-cm (FWD)
F.F torque :	45 ~ 80g-cm
REW torque :	45 ~ 80g-cm
Back tension :	1.0 ~ 2.5g-cm (FWD)
S/N ratio :	More than 45dB (PB, DC)
Distortion :	Less than 3.0% (PB, DC)
Noise level :	Less than 3.0mV (Vol MAX, PB, DC) Less than 0.3mV (Vol MIN, PB, DC)
Frequency response :	63Hz + 4 / – 4dB ~ 8kHz + 4 / – 4dB (NORMAL) 63Hz + 4 / – 4dB ~10kHz + 4 / – 6dB (CrO2)
Test tape :	TTA – 100 TTA – 200 TTA – 320(NORMAL) TTA – 310(CrO2)

MECHANICAL EXPLODED VIEW 1/1



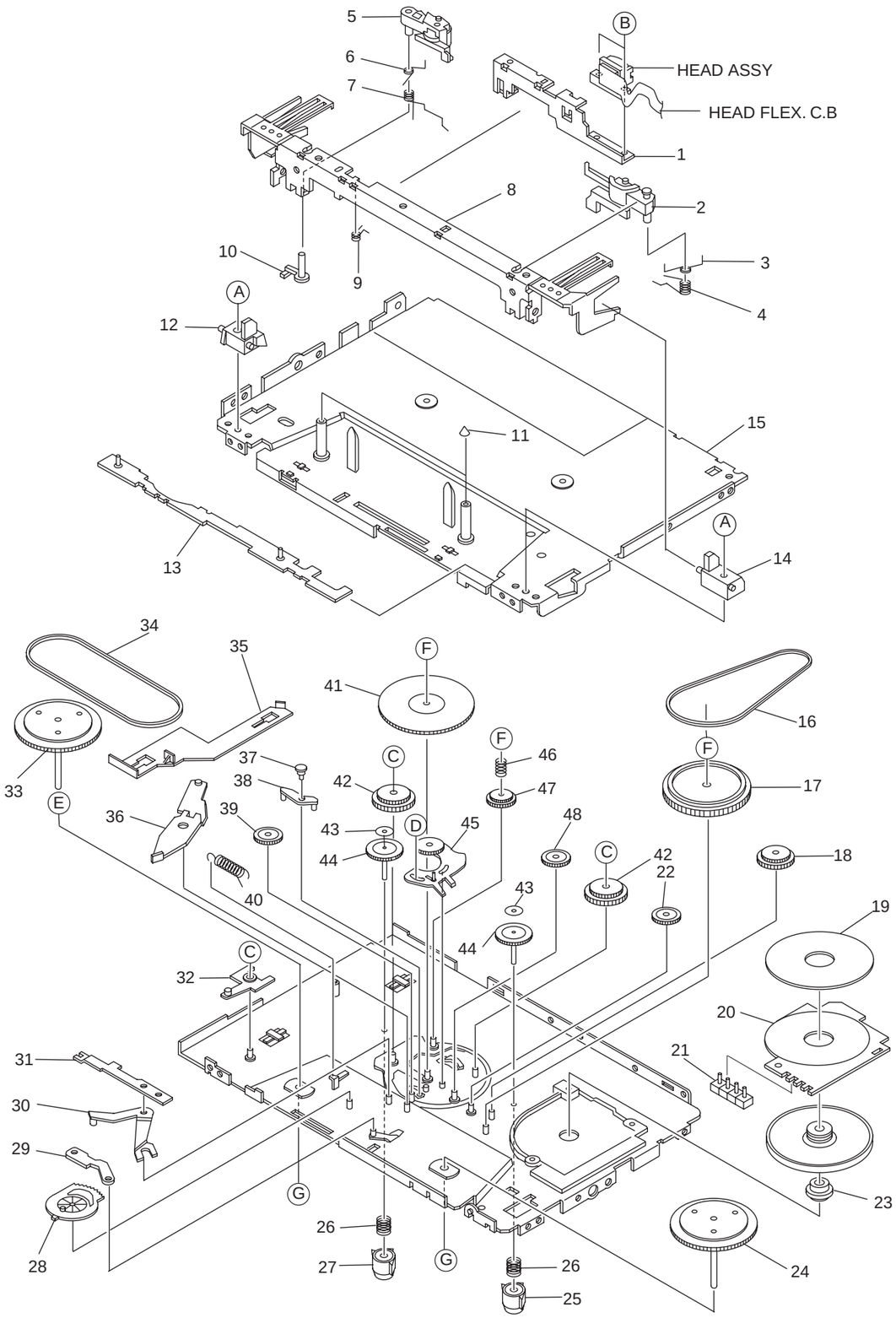
MECHANICAL PARTS LIST 1/1

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-HK4-023-010		LID,CASS BLU ASSY<[L]AH>
1	8Z-HK4-027-010		LID,CASS SIL ASSY 997<AE>
2	8Z-HK4-006-010		WINDOW,CASS
3	8Z-HK4-228-010		SPR-P,LID
4	8Z-HK4-205-010		HLDR,LID
5	8Z-HK4-206-010		HLDR,ARM ASSY
6	8Z-HK4-210-010		NUT, B-BOX
7	8Z-HK4-204-110		HLDR,CONT
8	8Z-HK4-212-010		BAT-CONTACT,(+)
9	8Z-HK4-229-010		SHAFT,ASSY
10	8Z-HK4-007-110		LID,BAT<AE>
10	8Z-HK4-026-110		LID,BAT BLU<[L]AH>
11	8Z-HK4-201-010		HLDR,BAT
12	8Z-HK4-215-010		LEVER,EJECT
13	8Z-HK4-211-010		BAT-CONTACT,(-)
14	8Z-HK4-015-010		FRAME,CTR BLU<[L]AH>
14	8Z-HK4-032-010		FRAME,CTR D-BLU<AE>
15	8Z-HK4-225-010		PLATE,KNOB
16	8Z-HK4-011-010		KNOB,SL OPEN
17	8Z-HK4-017-010		KNOB,SL BLS BLU
18	8Z-HK4-025-010		CABI,REAR BLU<[L]AH>
18	8Z-HK4-029-010		CABI,REAR SIL DOLBY<AE>
19	8Z-HK4-012-010		LENS,LED
20	8Z-HK4-230-010		SPR-C,OPEN
21	8Z-HK4-217-010		PLATE,OPEN
22	8Z-HK4-218-010		PLATE,LOCK
23	8Z-HK4-219-010		SPR-T,LOCK
24	8Z-HK4-216-010		BASE,LOCK
25	8Z-HK4-221-010		SPR-P,CASS
26	8Z-HK4-016-010		KNOB,SL HOLD BLU
27	8Z-HK4-008-010		KEY,CONT
28	8Z-HK4-014-010		FRAME,CONT BLU<[L]AH>
28	8Z-HK4-031-010		FRAME,CONT D-BLU<AE>
29	8Z-HK4-606-010		SW,LEAF 7ZM-1
30	8Z-HK4-607-010		SW,LID 7ZM-1
31	85-HK3-605-010		JACK,DIA3.5 ST 5P
32	8Z-HK4-203-010		HLDR,PWB
33	8Z-HK4-232-010		BAT-CONTACT,BOX(-) S
A	87-HK5-237-010		S-SCREW,1.4-2 CR NL
B	87-067-732-010		TAPPING SCREW, VT1.4-3
C	87-067-511-010		SCREW,V+1.4-2 BK
D	87-078-206-010		S-SCRW,1.4-0.6 B NL
E	87-078-183-010		SCRW-SR,1.4-1.4 BL
F	85-HK3-241-010		SCRW-SR,1.4-3CR L
G	8Z-HK4-231-010		S-SCREW,SERR+1.4-5.0 SWCH/CR
H	87-067-429-010		SCREW1.4-2.5
I	87-067-480-010		SPECIAL SCREW +1.4-3
J	8Z-HK4-227-010		S-SCREW,SERR+1.4-4.8 SWCH/CR

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

TAPE MECHANISM EXPLODED VIEW



TAPE MECHANISM PARTS LIST 1/1

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-ZM1-230-010		HLDR,HEAD
2	87-ZM1-254-010		ARM ASSY,PINCH R
3	87-ZM1-287-010		SPR-T,PINCH BACK R
4	87-ZM1-285-010		SPR-T,PINCH R
5	87-ZM1-252-010		ARM ASSY,PINCH L
6	87-ZM1-286-010		SPR-T,PINCH BACK L
7	87-ZM1-284-010		SPR-T,PINCH L
8	87-ZM1-225-010		HLDR ASSY,CASSET
9	87-ZM1-275-010		SPR-T,HEAD BACK
10	87-ZM1-269-010		SHAFT,PINCH
11	87-ZM1-267-010		CAP,CAPSTAN
12	87-ZM1-263-010		HLDR,CASSET HLD L
13	87-ZM1-221-010		LEVER ASSY,DIR
14	87-ZM1-264-010		HLDR,CASSET HLD R
15	87-ZM1-201-010		CHAS ASSY,OUT-SERT P
16	87-ZM1-271-010		BELT,MOT
17	87-ZM1-234-010		GEAR,PULLY
18	87-ZM1-244-010		GEAR,IDL D
19	87-ZS1-201-010		YOKE,ROTARY 7ZS1A
20	87-ZS1-205-010		COIL,FP 7ZS1A
21	87-ZS1-209-010		PIN ASSY,7ZS1A
22	87-ZM1-243-010		GEAR,IDL C
23	87-ZS1-202-010		BRG ASSY,7ZS1A
24	87-ZM1-248-010		FLY-WHL ASSY,L
25	80-ZM4-230-310		REAL CAP,L
26	85-ZM2-269-010		SPR-C GEAR REEL
27	80-ZM4-231-210		REAL CAP,R
28	87-ZM1-232-010		GEAR,CAM
29	87-ZM1-266-010		HLDR,DIR
30	87-ZM1-268-010		LEVER,CAM 2
31	87-ZM1-265-010		HLDR,CAM
32	87-ZM1-261-010		LEVER,SW
33	87-ZM1-250-010		FLY-WHL ASSY,R
34	87-ZM1-272-010		BELT,FLY-WHL
35	87-ZM1-260-010		LEVER,DIR OFF
36	87-ZM1-231-010		LEVER,CAM CONNECT
37	87-ZM1-207-010		SHAFT,CONTROL
38	87-ZM1-262-010		LEVER,FR CONTROL
39	87-ZM1-246-010		GEAR,CAM C
40	87-ZM1-282-010		SPR-E,CAM
41	87-ZM1-237-010		GEAR ASSY,SLIP
42	87-ZM1-241-010		GEAR,IDL A
43	87-ZM1-290-010		SH,AUTO 7ZM-1
44	87-ZM1-236-010		GEAR,REEL
45	87-ZM1-217-010		LEVER ASSY,T-UP
46	87-ZM1-281-010		SPR-C,FR
47	87-ZM1-245-010		GEAR,FF/REW
48	87-ZM1-242-010		GEAR,IDL B
A	87-ZM1-273-010		S-SCREW,1.7-5
B	87-ZM1-274-010		S-SCREW,HEAD 7ZM-1
C	87-B10-136-010		W-P,1.09-3.1-0.4
D	87-B10-228-010		W-P,0.95-2-0.2
E	87-ZM1-292-010		W,1.55-2.62-0.2
F	87-ZM1-291-010		W-P,0.86-3-0.25
G	87-ZM1-294-010		W-L,1.03-2.6-0.188

ACCESSORIES / PACKAGE LIST

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	8Z-HK4-905-010		IB,H(ECH)<AH>
1	8Z-HK4-907-010		IB,E(EGFSI)997<AE>
1	8Z-HK4-908-010		IB,E(EDPHNCZ)997<AE>
2	87-B30-253-010		HEADPHONE,HP-M041<AE>
2	87-B30-273-010		HEADPHONE,HP-M040B<AH>
3	8Z-HK4-951-010		RC UNIT,RC590<AH>
3	8Z-HK4-952-010		RC UNIT,RC997<AE>
4	87-B30-038-010		BAT,NB-5G
5	87-B30-137-110		CHARGER,RB-107 H<AH>
5	87-B30-083-010		CHARGER,RB-107 E<AE>
6	8Z-HK4-090-010		BOX,BAT ASSY SIL<AE>
6	8Z-HK4-091-010		BOX,BAT ASSY BLU<AH>
7	82-HK3-951-010		CARRYING,CASE<AE>

L▶

A4▶

サービス技術ニュース	
番号	連絡内容
G一　　一	
G一　　一	
G一　　一	

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO.,LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111

931261 9630469
Printed in Singapore